

● EPODOC / EPO

PN - JP59030716 A 19840218  
 PD - 1984-02-18  
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 OPD - 1982-08-09  
 TI - METHOD FOR UTILIZING ALUMINUM ASH  
 IN - UMEHARA YOSHIO; MINAMIDA TOMEIO; TSUJI KOUICHIROU  
 PA - SHOWA KOKI KK  
 IC - C01B3/08; C01B33/28

● WPI / DERWENT

TI - Utilisation of aluminium ash - by treating with caustic soda, adding sodium silicate to give zeolite, then diluting and precipitating aluminium hydroxide  
 PR - JP19820137438 19820809  
 PN - JP59030716 A 19840218 DW 198446 006pp  
 PA - (SHOW-N) SHOWA KOKI KK  
 IC - C01B3/08; C01B33/28  
 AB - J59030716 The ash is dissolved in 10-50% NaOH soln. so that sodium aluminate is produced then ( 1) sodium silicate is added and synthetic zeolite is produced and the gas evolved when the sodium aluminate is produced is recovered; ( 2) the sodium aluminate is diluted with water and a seed crystal is added to ppt aluminium hydroxide and the gas emitted when the sodium aluminate is produced is recovered. When the sodium aluminate is produced, at least 1 of the following cpds. is pref. added: gluconic acid or alkali gluconate, tartaric acid or alkali tartrate, triethanolamine, or sorbit (sic).  
 - USE/ADVANTAGE - Aluminium ash (prim., sec. and tert. ash) which used to be discarded (e.g. into sea etc) with high cost is now utilised.( 0/1)  
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● PAJ / JPO

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 AP - JP19820137438 19820809  
 IN - UMEHARA YOSHIO; others: 02  
 PA - SHIYOUWA KOUKI KK  
 TI - METHOD FOR UTILIZING ALUMINUM ASH  
 AB - PURPOSE: To utilize effectively aluminum ash by dissolving the ash in an aqueous soln. of NaOH to form sodium aluminate while recovering generated gas and by adding sodium silicate to the resulting soln. to convert the sodium aluminate into zeolite.  
 - CONSTITUTION: Aluminum ash produced as a by-product during the refining of Al or an Al alloy is dissolved in an aqueous soln. of NaOH having 10-50% concn., and water is added to dilute the soln. about 1.5-2 times. After adding gluconic acid, alkali gluconate, sorbitol or the like as required, the soln. is allowed to stand and filtered to remove insoluble matter. Sodium silicate is added to the resulting filtrate (sodium aluminate soln.), and zeolite is formed by vigorous stirring for about 6-7hr. Gas generated during the formation of sodium aluminate is recovered and utilized. The gas consists of about 90-99.9% H<sub>2</sub>, about 0.1-2% CH<sub>4</sub> and the balance NH<sub>3</sub>.  
 I - C01B33/28; C01B3/08